

Federal Transit Administration

24th ANNUAL ENGINEERS' MEETING

JUNE 11-13, 2008

Capital Hilton
1001 16th Street NW
Washington, DC 20036

AGENDA

Day 1
Wednesday, June 11, 2008
FTA Staff Only

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| Meeting Room | South American B |
| 1:00 – 1:30PM | Opening and Introduction Susan E. Schruth, Associate Administrator for Program Management |
| 1:30 – 1:45PM | Meeting Overview Aaron C. James, Sr., Director Office of Engineering |
| 1:45PM – 2:30PM | Technical Expectations of the PMOC <u>Moderator:</u> John Bell, Office of Engineering <u>Panel:</u> Ray Tellis, TRO-9; Melody Hopson, Susan Herre, TPM-20 |
| 2:30 – 3:00PM | Break |
| 3:00 – 3:45PM | New Starts Team Panel – Is it Getting Better? <u>Moderator:</u> Sean Libberton, Deputy Associate Administrator for Program Management <u>Panel:</u> Brian Glenn, TRO-3, Trina Reese, TPM-20, Amy Changchien, TRO-10, Matt Keamy, TRO-1 |
| 3:45 – 4:30PM | Panel Discussion on the Risk Assessment Process <u>Moderator:</u> Tony Zakel, Office of Engineering <u>Panel:</u> Tiffany Gallegos, TRO-8; Steve Bhattacharya, TPM-20, Hans PointduJour, TRO-2, Dudley Whyte, TRO-4 |
| 4:30 – 4:45PM | Wrap-Up/Tomorrow's Agenda Discussion Aaron C. James, Director Office of Engineering |

AGENDA

Day 2
Thursday, June 12, 2008
FTA Staff & PMO Program Consultants

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| Meeting Room | South American Room |
| 8:00 – 9:30AM | Continental Breakfast & Networking |
| 9:30 – 10:00AM | Welcome and Introduction Susan E. Schruth, Associate Administrator for Program Management |
| 10:30 – 11:15AM | FTA Administrator Remarks James S. Simpson, Administrator |
| 11:15 – 11:30AM | Break |
| 11:30 – 12:00PM | Meeting Overview and Office of Engineering Updates Aaron C. James, Sr., Director Office of Engineering |
| 12:00 – 1:00PM | LUNCH (provided) |
| 1:00 – 2:15PM | PMOC Procurement Status and Schedule James Harper, Director Office of Procurement |
| | PMOC Operating Procedures (OP's) John Bell, Office of Engineering |
| | ANPRM Status Carlos Garay, TPM-20 |
| 2:15 – 3:00PM | FTA State of Good Repair Initiative Sean Libberton, Deputy Associate Administrator Office of Program Management |
| | New Starts Policy Update Elizabeth Day, Director, Office of Project Planning |
| 3:00 – 3:20PM | Break |
| 3:20 – 4:45PM | Small Starts and Very Small Starts Requirements Panel <u>Moderator:</u> Kim Nguyen, Office of Engineering <u>Panel:</u> Nadeem Tahir, TRO-9; Maurice Foushee, TPE; Bill Kalt, TRO-7; Kam Shadan, GFI |
| | New Starts Project Lessons-Learned Panel <u>Moderator:</u> Susan Herre, Office of Engineering <u>Panel:</u> Dudley Whyte, TRO-4; Carlos Garay, TPM-20; Allison Agliardo, IEI; Steve Saxton, TRO-10 |

5:00 – 7:00PM

Reception - Statler Room

AGENDA

Day 3
Friday, June 13, 2008
FTA Staff & PMO Program Consultants

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|------------------------|---|
| Meeting Room | South American Room |
| 8:00 – 8:30AM | Continental Breakfast |
| 8:30 – 9:30AM | Determination of Grantee Technical Capacity Panel <u>Moderator:</u> Tony Zakel, Office of Engineering <u>Panel:</u> John Fisher, Jacobs; Robert Kanzler, TRO-3; Vince Gallagher, Hill International; Cyrell McLemore, TRO-5 |
| 9:30 – 10:00AM | FTA Participation with MTA Blue Ribbon Panel Matthew Keamy, TRO-1 |
| 10:00 – 10:20AM | Break |
| 10:20 – 11:00AM | New Starts Tunnel Lessons-Learned Panel <u>Moderator:</u> Mike O'Connor, Office of Engineering <u>Panel:</u> Dan Reich, Burns; Ralph Branche, TRO-2; Mike Wetherell, Urban Engineers; Deborah Boe, Shaw |
| 11:00 – 12:00PM | Industry Trends from the Contractor's Perspective <u>Presented by:</u> Bill Conis, Director Business Development, Siemens Transportation Systems Phillip "Pip" Shepley, Senior Vice President, Mass Electric Construction Company |
| 12:00 – 1:00PM | LUNCH (provided) |
| 1:00 – 1:30PM | PMOC Feedback Frank McCarron, Booz Allen Vince Gallagher, Hill International |
| 1:30 – 2:30PM | PMOC Report Acceptance Quality Levels (AQL's) Aaron James, Director, Office of Engineering PMO Program Performance Evaluation Results (2007) Philip Helmes, Vice President, CRA |
| 2:30 – 2:40PM | Break |
| 2:40 – 3:00PM | Evaluation and Wrap-Up Aaron James, Director, Office of Engineering |

Contractor Top Ten List Regarding the State of the Industry

1. Risk - the more risk hoisted on the contractor, the higher the price. Risk has several elements - likelihood of the project following the schedule in the spec, degree that "site" conditions are unknown or left for the contractor to determine and the commercial terms and conditions. Commercial Terms and Conditions can be addressed by an industry review and should provide "commensurate benefit, rather than just being included because they were in the last contract. Risks should be made the responsibility of the party most able to control them (Owner or Contractor). Examples of risks a Contractor cannot control and only drive the bid prices up: ROW acquisition, Utility company costs (relocations, cost for new services, moving overhead lines, etc.), Environmental, Hazardous Materials, changes in law after the bid date, force majeure, Differing Site Conditions, Permits, Owner's own negligence.
2. Systems Prime contract avoids markup of Systems by GC, and allows much better Grantee control of Systems design, Systems schedule, and Systems implementation, as there is no "filtering" by GC who does not understand Systems work.
3. The level of detail of the specs - the more detail, the more unique the solution, the greater the likelihood of a "high" price
4. Lack of ability to depend on information in the contract documents actually being correct. Since pre-investigation must be done by one of the parties, the Owner would save substantial risk money by performing that work themselves prior to the bid. It has to be done anyway prior to performing the Work, so the Grantee is already paying for it.
5. The number of required CDRLs/submittals and the time it takes for any agency to approve them. Utilize language which specifies products (preferably three) and requires a submittal only if a different product is proposed.
6. Cost of money: Retention – often 10% of the job is held for years and is generally redundant with bonding requirements. Bid validity for extended periods incurs an escalation penalty, allowing prepayment for stored materials allows elimination of escalation for much of the bid price. Use actual contractor overhead for changes and delays – audited per FARS (Federal Procurement Regulations). Contractually specified markups often highly inadequate, and if the contractor anticipates numerous changes for which he will be inadequately reimbursed, he will carry the difference in the base bid, as it is a perceived cost.
7. Engineers and consultants on cost reimbursable contracts – better to have fixed fee with incentives for finishing early and reduced fee for finishing late – get everyone on the same page
8. Mandatory personnel – large number of dedicated people often required, at large expense. Look at combining positions (do we really need a dedicated DBE administrator on a \$6M job? Does a signal engineer also have to be a PE in that state, etc.)
9. Lack of standards and all custom products ex.: signal cable construction unique to each city. Delete large number of referenced standards ("the kitchen sink"), many of which are inapplicable or conflict. Only specific standards which actually have a valid reason for inclusion should be included. Thus it should start from scratch on each contract rather than just adding more to an existing list.
10. Independent arbitrator for fairness – not Grantee's sole decision. Binding arbitration is good.

2008 Engineers' Meeting Summary

There were two theme's for this years Engineers' Meeting:

1. Challenges FTA face in ensuring projects are completed within budget and schedule
 - a. Detailed discussion on determination of grantee technical capacity
 - Grantee's using consultants more and more for capital projects, leading to management and project control concerns
 - Design and solicitation is taking an awfully long time, leading to increased costs
 - Definitely a trend to place more risk on the contractor, versus placing risk on the party best able to control that risk
 - b. Lessons learned on NS projects in general, and also recent findings regarding tunnel construction costs overruns
 - Recent tunnel contracts (2003-present time frame) have seen bid estimates anywhere from 30-50% higher than Engineer Estimates due to punitive difference site condition contract clauses and a lack of geotechnical baseline data for contractors to bid upon
 - Systems integration is becoming a problem at the end of projects – emphasis is placed upon closing civil contracts early, leading to systems having to deal with the grantee on interface issues
 - Performance of the pre-PE/LPA cost review has greatly helped in performance of the RA during PE in both performance and time
2. An examination of the transit industry today
 - a. State-of-Good-Repair
 - Why do properties defer maintenance in order to finance capital projects involving new corridors or extensions? Primarily political!
 - SOGR projects are much more labour intensive, and involved significant risks to Contractors driving up costs considerably
 - b. Industry trends from the Contractor's perspective
 - Siemens and Kiewit were invited to the Engineers' Meeting
 - Grantees are placing more of their risk on contractors, driving up costs (versus sharing risks)
 - Contractors are literally walking away from contracts due to overbearing T&C's (LD's, retention, bonding, indemnification, consequential damages, etc.)
 - Industry review of contract packages almost always results in no changes to the contract packages – grantee's are not taking contractor input seriously, and/or postponing tough decision-making until the high bid prices are received
 - c. FTA participating with the MTA Blue Ribbon Panel
 - Very difficult bidding environment - \$30B in projects in NYC metro area
 - Due to contract T&C's, bidders are actually taking jobs in the Middle East versus NYC
 - Dispute resolution boards/independent arbitrator